

# On Humor and Health

by Robert L. Latta

The expression "the basic humor process" is to be taken to refer to that temporally ordered sequence of states and events, whatever in the final analysis its nature may prove to be, the occurrence of which constitutes the necessary and sufficient condition of the occurrence of an experience of humor. This statement carries several presuppositions, among them these two: that the experience of humor consists basically of a temporally ordered sequence of states and events, and that there is at bottom only one such sequence, that humor is at bottom, to put the point in terms borrowed from Plato, one thing and not many. These presuppositions appear at least at first sight to be sound. As for the former, the humorist attempts to lead his audience through the stages of a process, a process that can go wrong at various points and in various ways. And as for the latter, given that the adjective "funny" be taken to mean "humorous" and not "peculiar," there are no glaring ambiguities in its application. It must be admitted, however, that these presuppositions, or others, and hence the very notion of the basic humor process may prove in the end to be unsound. If, on the other hand, there is in fact such a thing as the basic humor process, then, clearly, it is the fundamental task of the theory of humor to identify it.

Let us suppose tentatively that the basic humor process unfolds as follows. First, at what can be called Stage 1, the words, gestures, etc. that make up the initial part of a joke or joke-like performance, or the initial stages of a sequence of events not intended to be funny that nonetheless proves to be so in the end, or simply the ongoing second-by-second demands of life, serve to establish a state of tension in a person. The tension in question is not necessarily severe. It might, for example, be merely that entailed by the effort to follow ordinary conversation, or that aroused by an allusion to an affect-laden subject like money or sex. Next, at what can be called Stage 2, due to the manipulations of the joke-teller or clown, or to mere happenstance, there suddenly occurs to the person in question a new perception of things, a perception that constitutes a context within which the tension that has been established is pointless or useless. For example, he may suddenly see, or think he sees, that a threat against which he's been mobilizing in thought or action doesn't really exist. Next and finally, at Stage 3, this tension, being pointless or useless within the context of the new perception, is released through laughter, smiling, or other behavior of this range, such as puffing out through

the nostrils. It is released in this way because this is, as it were, the channel of least resistance in cases that happen to be of the sort in question.

This, of course, is a tension-release account of the basic humor process, one that owes much to Freud, Koestler, and John Allen Paulos.<sup>1</sup> As just stated, it leaves many important questions unanswered—for example: What precisely is the nature of the “tension” in question? Just how do laughter and smiling serve to release tension? That is to say, just what are the steps, physiological and psychological, of the process through which these responses discharge tension? Under what conditions and for how long does tension, once discharged in this way, remain discharged as it were? Precisely what range of feelings and “charged states” generally is it that can be discharged through laughter? Is it possible to discharge feelings, etc. selectively by means of laughter—e. g., the fear but not the happy anticipation at the approach of one’s wedding day? How is it that in some cases laughter and smiling constitute the channel of least resistance to the release of tension? Ought the experience of pleasure to be considered an essential element of the basic humor process? But leaving these questions aside for the moment, let us ask whether the process just described is indeed the basic humor process.

The test usually applied to hypotheses concerning the nature of the basic humor process consists in attempting to explain why a handful of jokes, by no means chosen at random, are funny. The test to be used here is somewhat different. It consists in determining whether, using no materials but those contained within the description of the basic humor process given above, it is readily possible to find plausible explanations of the various effects of humor on human health, in a broad sense of the expression. This test is thoroughgoing, in that the effects of humor on health are remarkably numerous and varied. Thus, it is reasonable to suppose that humor can and in some cases does foster good health—physical, emotional, and social—by relieving stress; by providing pleasure or enjoyment; by dissipating boredom; by causing vigorous laughter and thereby stimulating the cardiorespiratory system and so on; by promoting emotional detachment or disengagement; by affording a means of healthful play; by liberating a person; by deflating and thereby correcting a person’s perception of a threat, or his perception of the significance of an unfortunate *fait accompli*; by helping people to conquer fear and thereby fostering courage; by serving as a weapon against insomnia; by communicating health-giving truths effectively; by encouraging people to exercise their powers of imagination, creativity, and spontaneity; by providing an arena for accomplishment and increased self-respect; by working against the tendency to take oneself too seriously; by breaking the grip of a morbid obsession; by serving to abort an unhealthy course of action; by promoting the smooth functioning of a social group; and by affording a means of attacking and weakening politicians, social institutions, etc. that ought to be weakened—among other things. On the other hand, it is known or reasonable to suppose that humor can damage health, in a broad sense of the term, by causing vigorous laughter and thereby bringing on a cataplectic attack in a susceptible individual;

by imparting health-damaging misperceptions; by robbing a person of his ability to take effective action; by affording a means of denying or evading problems that ought to be faced; and by dissipating fellow-feeling—doubtless among other things.

This is, to repeat, a remarkable range and variety of effects. These effects must now be considered one by one. The relations among them, to be sure, form a complex network, but, for the sake of simplicity of exposition, cross-references of the form “see the discussions of X above and Y below” shall be held to a minimum.

(1) To repeat, then, it is reasonable to suppose that humor can foster good health by relieving stress. But on the present account of the basic humor process, it is readily intelligible that humor should relieve stress, for on this account this process culminates in laughter, smiling, or comparable behavior which functions to relieve tension, or, in other words, stress. Several comments are in order, however.

First, it's important not to lose sight of the fact that the words “tension” and “stress,” as used here, stand painfully in need of explication in physiological and psychological terms. Secondly, the question also remains through what mechanisms laughter, smiling, etc. bring about a reduction in tension. There are many possibilities—for example: (a) Vigorous, thigh-slapping laughter constitutes strenuous physical activity that can leave a person tired and relaxed just as jogging can. Conceivably, the minute physical effort involved in forming a smile or puffing out gently through the nostrils is sufficient in some cases to bring about relaxation in what is basically the same way. (b) When a person laughs loudly, the intense auditory and bodily sensations that accompany his laughter can well divert his attention momentarily from worrisome standing threats and thus promote relaxation. Conceivably, to a lesser extent, the bodily sensations that accompany a smile can work this same effect. (c) On the assumption that laughter and smiling, in those cases in which they constitute the culmination of the humor process, function to discharge tension that is pointless or useless according to a new perception, it is not surprising that general, public laughter should come to function as a signal that it is safe to relax. Conceivably, then—and this is the point—one's own laughter or smiling can come to function effectively as a signal to oneself that it is safe to relax.

Thirdly, it would appear that there are other, less basic, less direct ways in which humor can relieve stress—for example: (a) In many cases, at Stage 1 of the basic humor process, a person is confronted deliberately or by chance with a puzzle of one sort or another that diverts his attention from stressful ongoing demands to an unrelated one—that of solving the puzzle—that is much less stressful. (b) Humor provides pleasure, which brings relaxation. (c) Humor can dissipate boredom and thus eliminate a stress. (d) Humor tends to promote emotional detachment, and by doing so can reduce stress. It is readily possible to explain how it is that humor provides pleasure, dissipates boredom, and promotes emotional detachment in terms of the present hypothesis concerning the nature of the basic humor process. This is done below. Moreover, further effects and aspects of humor that suggest further ways in which humor relieves stress indirectly

are similarly explained. The upshot is that there appears to be nothing in any of this that cannot be explained by reference to the basic humor process as described above.

(2) Humor provides pleasure, and pleasure tends to promote both physical and mental health. On the present account, the basic humor process culminates in natural, spontaneous laughter or smiling, and this, of course, is pleasurable, at least ordinarily.

The question remains, however, why the laughter and smiling that constitute the culmination of the humor process are pleasurable. On the present account, laughter and smiling of this sort function as a tension-reduction mechanism, and thus part of the answer may lie in the fact, if indeed it is one, that tension-reduction in general is with certain qualifications pleasurable. Moreover, to the extent that laughter and smiling serve to reduce tension, they create pleasure in that they bring about a relatively relaxed, unstressed, and therefore pleasurable state of mind.

It would appear that humor provides pleasure in many less basic ways also—for example: (a) In affording opportunities for playful puzzle-solving and other forms of play, humor affords the pleasure of participation in distracting, engaging activity. (b) Humor can function effectively to change people's attitudes and perceptions, and thus, it is safe to say, can change them in such a way as to bring greater pleasure. (c) By promoting relaxation, humor can bring the pleasures of sleep. (d) Success in the effort to create or understand humor sometimes gives rise to a pleasurable feeling of self-respect, or, what is perhaps somewhat different, to "pleasure in cognitive mastery," to borrow an expression from the psychologist Paul E. McGhee.<sup>2</sup> (e) In some cases, humor promotes social bonding, and this can, of course, be pleasurable. (f) Humor can serve as a means of aggression, and using it in this way can bring the pleasure of successful aggression. (g) Insofar as it promotes good health in any way, humor brings the pleasures of health. All these connections are discussed more fully below: here too there appears to be nothing that cannot readily be explained by reference to the present account of the basic humor process.

(3) Humor can dissipate boredom, an unhealthful stress. The basic humor process, if indeed it takes the form described above, culminates in a pleasurable release of tension, but pleasure is an antidote to boredom. There are in addition indirect ways in which humor dissipates boredom: (a) In all the many ways in which the humor process can provide pleasure indirectly, it can serve to defeat boredom, and thereby reduce stress, strengthen health, and bring more pleasure. This, incidentally, suggests the great complexity of the relation of humor to health. (b) In many cases humor provides an opportunity and motivation for mental exercise. But mental exercise, particularly when undertaken in the expectation of pleasure, tends to extinguish boredom. It is by no means difficult, however, to explain how all this should be so in terms of the present hypothesis. Often when people experience humor, it is precisely a mental challenge that causes tension to build. Often, too, the knowledge that the reward of pleasurable

laughter is to be had motivates, at least in part, the effort to meet this challenge. The effort to perceive the matter at hand in a new way in order to get the reward of pleasure builds tension. To put the stages of this process in chronological order: tension builds with the effort to find a new perception (Stage 1 of the basic humor process); then the, or a, new perception that works is found (Stage 2); then the reward of laughter follows (Stage 3). A new perception that "works" means, of course, one that brings about a sudden release through laughter, smiling, etc. of the tension that has been established. This point concerning mental exercise comes under the more general point that insofar as humor affords a means of play, it can serve as a means of dissipating boredom, perhaps chiefly in that play is a source of challenge and pleasure.

Perhaps it ought to be noted at this point that humor does not essentially involve intellectual challenge. Consider the following case. A boy on his way home from school, dressed in good clothes, tenses to jump across a fairly wide brook. He makes a flying leap, lands one-third of the way across, goes in up to his thighs, slips on a smooth rock on the bottom, and falls all the way in. He stands up and laughs. Or his friend standing on the bank, who has seen the whole thing and participated vicariously, laughs. This case manifests the three stages of the basic humor process very clearly: tension, sudden perception that invalidates the tension, release of invalidated tension through laughter. There is no good reason not to count it as an example of humor. If it involves only the elements included in this description, and not, for example, any desire to cover embarrassment on the part of the boy in the brook or any sense of superiority on the part of the boy standing on the bank, then it is, to be sure, a very simple example, but it is an example of humor nonetheless. Intellect, however, enters into this case, or rather need be assumed to enter into it, only to this extent: that the jumper or his friend perceives that he has fallen in. No intellectual challenge is met. The challenge that creates tension in this case is not intellectual but physical, and this challenge yields laughter not when it is met but when it is not met.

To return to the main argument, on the present account, it is not at all difficult to imagine how it is that humor dissipates boredom.

(4) Humor, of course, sometimes causes vigorous laughter, and vigorous laughter stimulates the cardiorespiratory system, serves as a form of "jogging for the innards," etc.<sup>3</sup>

But this wording, "humor sometimes causes vigorous laughter," suggests a question. In precisely what way does humor involve laughter? If the present account is correct, the words "the humor process sometimes culminates in vigorous laughter" express the case more clearly. The point is that the laughter (and smiling, etc.) of humor are not to be regarded as an extraneous effect, but rather as an integral, essential part of the basic humor process, which is to say, of any experience of humor.

The question of the details of the connection between laughter as a physical activity and good health is important but need not be pursued here.

(5) Humor promotes emotional detachment or disengagement, which might be defined

as a comparative lack of emotional involvement. To detach oneself from others to a certain extent—for example, from one's parents—is necessary and healthful. To be too reactive to threats or unnecessarily consumed by worry is dysfunctional and unpleasant and therefore unhealthful. Detachment of a wholesome sort represents a state opposed to morbid obsession or compulsion. Thus, in some cases and to a certain extent, detachment represents good health. (It is also true, of course, that excessive emotional detachment from others or from threats and problems is pathological.)

The question, then, is whether it is readily possible on the present account to imagine mechanisms whereby humor might plausibly be thought to promote detachment. To begin with, here are several relatively simple, straightforward possibilities: (a) On the present account, it is not difficult to explain how it is that a joke or funny occurrence yields pleasure: see above. Nor is it difficult to explain how it is that humor often carries interest. Anything that promises to bring pleasure tends to generate interest. Moreover, the narrative, pantomime, or unplanned and uncontrolled development that establishes a state of tension at Stage 1 of the basic humor process can well be something that generates more or less strong interest in its own right. The same, moreover, is true of the new perception that occurs at Stage 2. But a joke or funny occurrence, just in that it is enjoyable or interesting, and like any other enjoyable or interesting thing, can distract attention from an obsession, threat, or problem to itself. It might even happen that in doing so, it breaks the grip of a mild obsession or worry and thus brings about more or less lasting detachment. (b) Stage 2 of the basic humor process consists, again, in the sudden occurrence of a new perception of things. But this new perception may be such as to promote detachment. For instance, Evan Esar defines a graveyard as “a place filled with people who haven't made a mistake in years.”<sup>4</sup> It is reasonable to suppose that some people who read or hear this joke, though surely not all, respond to it as follows. The word “graveyard” summons up thoughts of death and feelings of fear and gloom, but then, immediately and in striking fashion, the mock definition summons up a positive view of death, as it were, by bringing to mind the fact that death ends the humiliation, frustration, and pain of life as well as the joy. This new perception renders the fear and gloom inappropriate or less appropriate, and in consequence the tension associated with these feelings, or some of it, is spilled in a chuckle. For present purposes, the point is that in this case, the new perception promotes detachment: a person who sees death in this new light can relax a little more at the mention of mortality than he might have otherwise. (c) A pun can distract a person, at least momentarily, from what might be called its initial subject, i. e., from that which, in the course of a successful attempt to follow the pun, constitutes the object of attention at Stage 1. For instance, having informed his audience that he had been on safari in Africa, Groucho Marx quipped, “We shot two bucks, but that was all the money we had.” Here, the initial subject is that of men shooting animals on safari in Africa, or more generally, that of hunting for sport. This is what the listener, or at any rate the typical listener,

thinks of first. But the second half of Groucho's statement, the part that follows the pause, leads the listener to drop this subject and think instead of the *words* he is hearing, for he must think of words in order to make sense of the statement as a whole. This pun, then, to repeat, diverts the listener's attention at least momentarily from its initial subject. But perhaps the effect can be more or less permanent. If the initial subject of a pun is a source of worry or distress or constitutes an obsession, the pun, by diverting attention from it and bringing pleasure and relaxation almost immediately, might contribute to establishing a habit of detachment. This is, at any rate, a plausible hypothesis. (d) Stage 3 of the basic humor process consists, again, in a release of tension through laughter, smiling, or other behavior of this range. But the resulting relaxation in and of itself entails a degree of detachment. (e) Humor brings pleasure, and pleasure tends to distract a person from pain. (f) As noted above, the very sound and the various bodily sensations generated by one's own laughter tend to distract attention to themselves.

There are other ways, perhaps more indirect, in which humor promotes or might be thought to promote detachment: (a) As mentioned above, humor affords a means of play. But play is typically conducted in a detached frame of mind. (b) As stated above, humor can deflate a person's perception of a threat or his perception of the significance of an untoward event that has already occurred; but this, of course, brings about greater detachment. (c) Humor can be used to impart messages of many sorts in a forceful and memorable way, including messages that teach detachment. (d) In making a joke about oneself, one takes the position of an outside observer as it were, and this fosters detachment. (e) Humor can, conceivably, help to break the grip even of powerful morbid obsessions. (f) Humor can be used to attack people or principles, and attack can serve as a means of detachment in many ways, most of which are, perhaps, more or less obvious. The psychologist Jacob Levine states that adolescents use sick humor as a means of rebellion against family and old ways; but surely this particular use of humor represents attack for the sake of detachment, whatever it may represent in addition.<sup>5</sup> (g) In many cases in which a person experiences humor, he does so in the process of following a fantasy: the fantasy induces tension at Stage 1 of the basic humor process and then, in context, induces the new perception that renders that tension pointless at Stage 2. But the motivation to engage in the fantasy typically arises at least in part from the expectation of receiving the pleasure of laughter, at what is according to the present hypothesis Stage 3. Humor, then, to state the point in its barest essentials, fosters fantasy. But fantasy fosters detachment. It is, at any rate, respectable to hypothesize that an engrossing fantasy, by diverting attention from other things to itself and bringing pleasure, of various sorts, simultaneously, might help a person to become less obsessive, either in general or with respect to something in particular. Moreover, a fantasy might teach a lesson of detachment, i.e., might through its narrative content serve to teach a person to be more detached in a certain respect. It might, in fact, teach this lesson

more effectively than a straightforward sermon by circumventing the subject's psychological defenses. (h) Humor can make overconcern itself look ridiculous and thereby promote detachment.

A single joke or funny occurrence may, of course, create detachment in several different ways at once. An eighteenth-century British soldier in a brigade that was about to take a volley of French musket fire remarked, "For what we are about to receive, may the Lord make us truly thankful."<sup>6</sup> This, it appears reasonable to conjecture, created relative detachment by prompting a shift of attention from the fearful situation at hand to the soldier's words and to images of the entirely different, typically secure, gratifying situation in which these words are ordinarily used, by causing laughter the sound of which likewise diverted attention from the fearful situation at hand and in addition, perhaps, strengthened awareness of the presence of friends and allies, by bringing about a general release of tension through laughter, and perhaps in other ways.

Humor yields detachment, but at the same time it appears to be a precondition of the experience of humor that one be detached, or at any rate be willing to allow oneself to become detached momentarily. It appears, that is, that detachment is both a product and a precondition of humor. By way of illustration of the latter half of this proposition, imagine that a couple has seven children and that every year for seven years, quite regularly, one of these children dies of measles.<sup>7</sup> It may be supposed that the parents are not at all detached and that for them the tragedy simply deepens every year with each additional death. A neighbor, on the other hand, might well react as follows. At the first death, he just sympathizes and sees nothing funny in the situation. At the second death, however, he becomes intellectually absorbed in the coincidence of it all, and from that point on, moreover, grows more and more used to the recurring deaths; but this leads him to take a more abstract, detached view of what is happening. As the appointed time, as it were, approaches each year, his anticipation of the death of yet another child grows stronger. Each time he hears that another child has died, as expected, he laughs or chuckles and thus releases the newly pointless tension of expectation. To be sure, he might laugh for entirely different reasons also—for example, a vivid realization of the extreme improbability of the course of events in question followed immediately by focus on its reality might yield a bemused chuckle. The point, however, is that the relative detachment of the neighbor appears to be a precondition of his experience of humor. The intense involvement of the parents, in contrast, makes it impossible for them to see the humor in the situation, to use the common expression. The general principle at work here appears to be the following. Intense involvement in a problem, or intense concern over an outcome, or determination to succeed in a task, or strong fear of a threat, etc., i.e., full, intense engagement in something, typically entails a refusal to do anything that might cause one to lose track of things or to lose one's sense of urgency, and this in turn entails a refusal to engage in humor. It is possible to explain the dynamics of the case in terms of the present hypothesis: If the experience of



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humor is to occur, then something must somehow establish tension in a person and thus bring him to Stage 1 of the basic humor process. If this something is an ongoing concern of his, then in order to make the transition to Stage 2, he must abandon this concern at least momentarily, for Stage 2 in this case consists precisely in the occurrence of a new perception of things that cancels this concern. On the other hand, if he is actively and seriously concerned about something, but that which is to establish the state of tension that is, as it were, to fuel laughter at Stage 3 is something else—if, for example, he is grieving over his lost child when a friend starts in with a joke about baseball—then, even to get to Stage 1 of the basic humor process, he must abandon his ongoing concern at least temporarily in order to focus on this other matter. Moreover, in either case, if he allows himself to proceed to Stage 2 of the basic humor process and hence to Stage 3, which follows automatically, he thereby allows himself to relax and lose control in many ways. One need, however, possess no more than ordinary acuity to be able to sense intuitively that engaging in humor carries all these consequences.

Perhaps, then, it can be said that humor fosters detachment in an additional way: one must abandon ongoing or current concerns at least momentarily in order to be able to follow it, but the pleasure to be had is an inducement to do so.

In sum, it is clear that the relation between humor and detachment is multifaceted and complex. It appears to be readily possible, however, to explain that relation, plausibly if tentatively, in terms of the present account of the basic humor process. The suggestions made above concerning the various ways in which humor promotes detachment indirectly, as by affording a means of play, etc., are filled out at various points below.

As a footnote to this section, it might be well to consider the claim made by the psychologist William McDougall that laughter evolved in the human race as an antidote to sympathy, i.e., as a means of defense against excessive sympathy, which is, of course, dysfunctional.<sup>8</sup> Humor does, apparently, tend to block sympathy, at least momentarily. Apparently, one cannot find amusement in another's fear, pain, or misfortune and simultaneously sympathize with him fully. To illustrate, every day a carpenter at a construction site grabs up his lunch box literally on the run. One morning his fellow carpenters nail the box down firmly through the bottom. At lunch time he comes running, grabs the box as usual, and crashes to the floor, wincing and cursing in pain. At the very moment his fellows burst out in laughter, they feel and show very little tender concern or sympathy. How is it, then, on the present account, that humor blocks sympathy? But note that to be less sympathetic is to be more detached. Thus a further question arises: Is there something special about the mechanisms through which humor blocks sympathy in particular, as opposed to other sorts of engagement?

No question of sympathy arises except in cases of pain, misfortune, or the like. But on the present account, one who finds humor in the materials offered by such a case makes a sudden transition from an engaged orientation that entails tension, whether that

orientation be one of concern and sympathy, amazement, fear, or something else, to a new perception that undermines that initial orientation, as it were. This transition, of course, is the transition from Stage 1 to Stage 2 of the basic humor process. If the initial orientation, then, is one of sympathy, then the new perception that occurs at Stage 2 is precisely one that undermines sympathy, for if it did not do so, it would not bring about laughter or a smile, which is to say that the basic humor process would not reach its culmination, which is to say that there would occur no experience of humor. Thus, if one does proceed to Stage 2, then, at least momentarily, one perceives things from a perspective that precludes sympathy, or at any rate full sympathy. Moreover, the resulting laughter, smiling, etc. brings distraction and relaxation that are incompatible with fully engaged sympathy. On the present account, then, it is not at all difficult to explain how it is that humor often blocks sympathy. (On the other hand, humor might, to be sure, foster sympathy by conveying a message of sympathy effectively.) But if this explanation is correct, then the mechanisms through which humor reduces sympathy can also bring about a reduction in level of engagement of any sort—emotional engagement, focussed attention, even tense physical readiness. In other words, humor is an antidote to sympathy simply in that it is an antidote to engagement of any kind. But in view of this and the fact that humor serves many useful functions besides disengagement, it appears most unlikely, contrary to McDougall, that humor evolved in the human race primarily as an antidote to sympathy.

(6) Humor affords a means of healthful play. Perhaps it can be said that play consists basically in mental or physical exercise that yields pleasure and temporary distraction and typically is not or at any rate not directly applied to any serious purpose. It is striking that very nearly the same things can be said of humor. In many cases, engaging in humor involves mental exercise or the exercise of physical skills, and yields pleasure and at least temporary distraction from everyday and chronic concerns. In many cases, then, though certainly not all, in engaging in humor people engage in play. It happens that one can be led through Stages 1 and 2 of the basic humor process, and hence to Stage 3, by means of speech, including speech of a high level of sophistication, and this is, primarily, how it comes about that creating and appreciating humor often involves mental exercise. Playing practical jokes and play acting for humorous effect, of course, often involve the exercise of physical skills.

(7) As Freud points out, humor affords a means of liberating oneself temporarily from the demands of adult life and from the demands of realistic, logical thought and behavior in particular. But it is not difficult to explain this in terms of the present hypothesis. To begin with, the narrative, the play acting, or whatever which establishes tension and/or leads to a new perception that renders continued tension pointless—that is, which leads the subject through Stage 2 of the basic humor process—need not be realistic or logical or show maturity to be effective: it can be fanciful, illogical, or childish. Moreover, the pleasure of humor, and, perhaps, the educational value of humorous play, render

temporary lapses from adult standards of behavior acceptable—to the extent, indeed, that they are. In other words, humor provides both an opportunity to escape into fantasy, nonsense, and childish behavior and several good excuses for doing so.

The psychologist Harvey Mindess describes many ways in which humor can liberate, but perhaps he strains too hard in an effort to show that to liberate is the essential function of humor. At any rate, many phenomena that he treats are treated in different connections here.<sup>9</sup>

(8)-(10) By discharging tension, promoting emotional detachment, conveying information effectively, and, in the form of ridicule, delivering a sting, humor can serve to deflate a person's perception of a threat or of the significance of an unfortunate *fait accompli* and can help people to conquer fear, and moreover, by bringing relaxation, it can serve as a weapon against insomnia. The mechanisms involved are described in terms of the present hypothesis at various points above and below. Here, suffice it to note that there are many ways in which humor brings relaxation: it relieves stress, provides pleasure, promotes emotional detachment, affords a means of play, works against the tendency to take oneself too seriously, can help to break the grip of a morbid obsession, and affords a means of improving one's relations with others. Clearly, then, relaxation is one of the most prominent of the benefits brought by humor.

(11) Humor can and in some cases does foster good health by communicating health-giving truths effectively. The question is why a humorous message might serve to communicate more effectively than one with just the same informational content but no humorous effect, or, more generally, how humor can serve as an aid to communication. Here are some conjectures: (a) If a message is put in a humorous way—in terms of the present account, if it is put in such a way that it brings the typical listener through Stage 2 of the basic humor process and hence to Stage 3—then it will be pleasurable to recall that message and repeat it to oneself, but doing so, of course, aids memorization. (b) Similarly, it is pleasurable to repeat humor to others, and this promotes dissemination of any message that a funny anecdote, joke, witticism, or the like might carry. But why is it pleasurable to do this? To begin with, in repeating humor to others, one repeats it also, in effect, to oneself. Moreover, in consequence of giving others the pleasure of laughter, one receives the pleasure of giving. Moreover, if one can get a group to laugh at one's jokes, then, at least in some cases and to a certain extent, this confirms one's standing in the group and helps the group to function more smoothly, and this, of course, can bring self-esteem and the pleasures of exercising influence. Moreover, the laughter of others tends to reinforce one's own laughter and in doing so augments one's pleasure. This is perhaps partly because, as mentioned above, people tend to take the laughter of others as a sign that it is safe to relax, to let go of standing tension. To explain this in terms of the present account, public laughter, one or more persons laughing in the presence of one or more others, tends to convey a new perception of things: viz., the perception that there is no danger, no need to hold oneself in a tense

state of readiness, and this perception tends to cancel, as it were, all attitudes that sustain tension—that is, it tends to take the listener through Stage 2 of the basic humor process. If this explanation is correct, then in reinforcing the laughter of its audience, public laughter functions at least in part in the same way the punch line of a joke functions. The laughter of others, of course, often leads a person to laugh even though the joke or anecdote in question has, through repetition, long since ceased to be funny to him, or never was funny to him. In such a case, it is only the laughter of the others that functions as a punch line—that is, it is only that that brings the listener to Stage 2 of the basic humor process. There are, no doubt, further reasons why it is pleasurable to repeat humor to others. (c) As many commentators have remarked, used skillfully, humor fosters efficient learning. There are several reasons for this, too. To begin with, it is reasonable to suggest that vigorous laughter often produces physiological effects that make for alertness. Moreover, by relieving stress, promoting emotional detachment, diminishing fear and worry, helping to break the grip of obsession, and promoting the smooth functioning of a social group, humor can serve to weaken or eliminate influences which in various ways interfere with learning. Moreover, if humor is woven into a lesson, formal or informal, this makes the lesson more pleasurable, and this of course can serve to motivate the learner to keep at it. Moreover, humor encourages creativity, imagination, and spontaneity : see just below. Moreover, precisely by promoting good general health, humor increases people's capacity for learning. Here too there are, no doubt, further considerations. (d) In many cases, a person must make an intellectual effort if he wishes to arrive at the new perception that brings on laughter. But there is perhaps a tendency to dwell on, or at any rate to retain in memory, and also, perhaps, a tendency to value more or less highly, a perception that has thus been gained through considerable effort. (e) Humor can catch a person off guard—i.e., not on guard against a message that he doesn't want to hear. Unsuspecting, he puts himself in a receptive frame of mind in the expectation of receiving the pleasure of laughter, makes an effort to resolve the puzzle the case presents, and then receives a message in the form of the punch line, the resolution, or the like. (f) A joke, witticism, anecdote or the like that carries a message can also carry a barb, i.e., it can embarrass or otherwise cause pain to the listener, and this can in some cases make him more receptive to the message. Perhaps this works the way a slap in the face does, by altering mood or attitude.

Perhaps it is worth noting that humor often communicates to a person in an effective way the fact that others share his problems and frustrations. This information puts his problems into perspective for him, tends to dispel unnecessary self-doubt, works against exaggerated anxiety, discouragement, and depression, and helps him to see that standard methods of coping apply in his own case. Problems and frustrations, of course, make good material for a joke or humorous anecdote in that they are associated with high levels of tension. These high levels of tension often translate into vigorous laughter

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and high levels of pleasure at Stage 3 of the basic humor process. But these high levels of pleasure tend to enhance the impact of any message that the joke or anecdote might carry. This is, at any rate, a plausible hypothesis.

(12) Humor encourages people to exercise their powers of imagination, creativity, and spontaneity. In the case of intentional humor, it can in principle take any degree of creative effort to formulate and perfect the narrative or performance that is to lead the audience through Stage 2 of the basic humor process. Moreover, it can take a person any degree of imaginative effort to understand such a narrative or performance, that is, to follow it through Stages 1 and 2. Similarly, one must be alert and mentally active to perceive unintended humor, that is, to perceive, in such a way that one is led through Stage 2 and hence Stage 3, events or objects that happen by chance to carry the potential of leading a person through these stages. (This of course represents an answer, however sketchy, to the question what it means to understand, perceive, or follow humor, to get the point of a joke, etc.) Perhaps it ought to be added that the perception that establishes tension at Stage 1 of the basic humor process often if not usually constitutes a view of things from a position well within the proverbial rut, as it were, whereas the new perception that occurs at Stage 2 is often if not usually, at least within context, a startlingly novel one. It is, as it were, a perception that can be gained only from a point outside the proverbial rut, and one must consequently leave the rut in order to gain it. But, to complete the argument, the prospect of receiving or giving the pleasure of laughter often motivates a person to make the necessary imaginative or creative effort, and repeated success might well condition him to making such efforts.

In addition, as Bergson stresses, humor can be used to ridicule rigid, unthinking behavior and thus to shame people into questioning or abandoning it.<sup>10</sup> Such behavior makes good material for humor in that it serves very effectively to undermine respect. The topic of ridicule is discussed below.

(13)-(15) Humor provides an arena for accomplishment and increased self-respect at least in that it provides an arena for creative effort. Moreover, humor works against the tendency to take oneself too seriously. This tendency is unhealthy in that it involves an unrealistic view of things, breeds unnecessary anxiety and tension, and can bring about problems in one's relations with others, perhaps among other things. Humor can be used against it in that, quite in general, it can be used to deflate inflated perceptions and to ridicule. Moreover, humor can, perhaps, be used in treating obsessive/compulsive behavior. Fatigue, tension, and anxiety foster such behavior, and humor can be used to alleviate these conditions; it can conceivably be substituted for meaningless thoughts and rituals as a focus of attention and interest; it can perhaps be used to convey in a forceful or penetrating way new insights that get to the root of the problem and contribute to reeducation—as, for example, in showing that strong feelings of guilt are out of place; and, conceivably, it can be used as a means of sharp, effective criticism of personality traits and tendencies, such as perfectionism and overconscientiousness, that

foster the sort of behavior in question.<sup>11</sup> But none of this appears to involve any factor not explained above or below in terms of the present hypothesis.

(16) Humor can serve to abort an unhealthy course of action, in several ways. If the occasion is fleeting and a joke or quip is introduced at just the right moment, the response to it might take the place of a harmful act. In such a case, the primary mechanisms are perhaps these: the new perception that occurs at Stage 2 of the basic humor process, and often, it would appear, remains at the focus of attention through Stage 3, distracts a person from the matter at hand, while the laughter that occurs at Stage 3 prevents him from exercising full control over his musculature. In addition, the release of tension, or in other words the relaxation, that comes about through laughter might well rob a person, at least momentarily, of the anger or other emotion that would otherwise have motivated a harmful act. Moreover, humor can communicate in a convincing way information that dissuades, and ridicule, as a form of punishment, can also dissuade.

(17) In many ways, humor can be used to maintain or improve social relations and to promote smooth functioning in a social group. To begin with, at crucial junctures, or perhaps more or less constantly, it can function to vent emotions such as fear, sexual lust, or anger that might otherwise lead to ineffective, damaging, or disruptive behavior. In the case of sexual and hostile humor, the laughter that occurs at Stage 3 constitutes a pleasurable release of sexual or hostile feeling, a release that can to a certain extent substitute for release in orgasm or bloody victory. Moreover, sexual and hostile humor does not usually carry the dangers and penalties of forcible sex and aggression, penalties that include, for example, disgust with oneself at having caused bodily or serious emotional injury to another person. Thus, humor of this type allows people to vent sexual and hostile feeling relatively freely without doing very much damage. Moreover, humor yields pleasure, and this benefits the humorist himself in that others tend to value him for his humor, and promotes smooth functioning in a group in that it tends to bring general satisfaction and hence tranquillity. Moreover, humor can be used to communicate in an indirect or tentative way: people often engage in humor in a playful spirit, and for this reason, provided that a person puts a serious comment humorously, he can withdraw it by saying something to the effect of "I was just kidding." Moreover, humor can contribute to or perhaps even create a sense of solidarity within a group. Responses to humor can reveal much about personal characteristics such as background, attitudes, beliefs, character, and intelligence. At least two reasons can be given for this in terms of the present hypothesis. First, the initial portion of a humorous narrative or performance, the portion that is intended to establish tension in such a way as to bring the audience to Stage 1 of the basic humor process, or in cases in which prevailing circumstances are relied upon to establish tension in the required way, those circumstances, may well actually bring one person to Stage 1 and fail with another precisely on account of differences in personal characteristics such as those just listed. Secondly, a

listener can be either more or less willing to abandon Stage 1 perceptions of a topic momentarily in order to receive the pleasure of laughter, and his degree of willingness to do so sometimes reveals much about how he regards that topic. In at least some cases, then, in which the members of a group laugh together at a joke or funny occurrence, their laughter constitutes evidence of a shared mastery of the nuances of a language or culture, and of shared values, fears, hostility, or determination, in that a person who did not share that mastery and those values, etc. would find no humor there—i.e., would not move through Stages 1-3 of the basic humor process in response to that joke or funny occurrence. But this evidence can lead the members of the group to recognize their common background, values, and orientation. Moreover, it stands to reason that humor can facilitate the process whereby leaders emerge and survive: a skillful use of it shows intellectual ability, and it can be used as a weapon. This list of considerations could no doubt be extended.<sup>12</sup>

(18) Humorous ridicule can be used to attack and weaken an individual, social institution, attitude, etc. that ought to be weakened. The basic technique, apparently, is to snap the audience suddenly from Stage 1 to Stage 2 of the basic humor process by presenting a degrading characterization of the subject. This has a humorous effect, in those cases in which it does, because ordinary, engaged perceptions of the subject sustain tension to a significantly greater degree than the perception generated by the degrading characterization does. Such an attack may be telling for any of several reasons, among them: If it succeeds in bringing the would-be defender or his would-be audience to Stage 3, it may well be difficult for him to reply immediately, for as long as a person is laughing at a joke or quip that ridicules, and is consequently focussed on the degrading characterization it entails, absorbed in pleasure, engaged in a process of relaxation, and lacking full control over his musculature, he is in a poor position to make, follow, or participate vicariously in a reasoned rebuttal or a counterattack. Moreover, even when the laughter subsides, those who have laughed are in a more or less relaxed and thus demobilized condition. But laughter in response to ridicule can also weaken respect for the object of ridicule, or so it appears reasonable to suppose. Respect may be said to have an intellectual aspect ("I think he is very capable," etc.) and an emotional aspect ("I fear him," etc.). One or the other of these aspects might predominate in a given case: one might hold a high opinion of a person but feel no strong emotional response to him, or think him average or despicable but fear him for his power. Especially in the latter sort of case, the laughter that occurs at Stage 3 can weaken respect, at least temporarily, by draining away the fear, awe, or other emotion that constitutes its emotional aspect. Moreover, the degrading characterization entailed by a hostile joke may be accurate (or be perceived to be accurate) in significant respects, and thus it may convey information (or misinformation) that damages its object more or less permanently. What is more, the pleasure to be had from repeating this characterization may encourage memorization and dissemination of this information (or misinformation).

It is perhaps significant, too, that if an audience laughs in response to humorous ridicule, this shows that they assent to the degrading characterization it entails to at least a slight extent, for it shows at least that they are willing to entertain that characterization, to hold it in mind for a moment. There is, perhaps, a sort of bribery at work here: it is as if one were told, "if you focus on this characterization, you will receive the pleasure of laughter."

Items (19)-(23) have to do with ways in which humor can damage health, in a broad sense of the term.

(19) The psychologist Robert M. Goldenson defines cataplexy as "a sudden paralysis of all voluntary movement resulting in a collapse of the entire body," and states that such attacks are "provoked by emotional excitement—most often by an uncontrollable fit of laughter."<sup>13</sup> Perhaps, then, humor might bring on such an attack in a susceptible individual. This, however, appears to have no bearing on the truth or falsity of the present hypothesis.

(20)-(22) In all the ways in which it can impart perceptions—with respect, for example, to the gravity of a threat or the degree of sympathy another person deserves—and in all the ways in which it aids communication, humor can impart misperceptions and further the dissemination and impact of misinformation. Furthermore, humor can rob a person of his ability to take effective action, in several ways: by distracting his attention to a new, irrelevant perception at the very moment action is necessary; by causing him to laugh and thus denying him full control of his musculature and draining him of arousal at such a moment; by causing him to feel that a threat is not serious, a victim not much in need of sympathy or help, etc. when this is not in fact the case; or by altering his beliefs on an analytic level to the same effect. Furthermore, humor affords a means of denying or evading problems that ought to be faced. In some cases, the very act of joking about a serious problem constitutes a denial of its seriousness in that it's understood by all that it is fitting to joke about it only if it isn't in fact very serious. It is unfitting to joke about a serious problem, when indeed it is, chiefly, perhaps, in that doing so tends to bring a relaxation of vigilance and effort and a diminution of arousal. But there appears to be nothing in any of this that isn't explained above, at least in rough terms and tentatively, by reference to the present hypothesis.

(23) Humor sometimes dissipates fellow-feeling where fellow-feeling would be to the good. It does so, perhaps, primarily in two ways: in some cases it works against sympathy, and in some cases, in the form of ridicule, it injures. Sometimes, too, humor conveys messages that it wasn't meant to convey. In some cases, the portion of a humorous narrative or performance that is intended to bring the listener to Stage 2 of the basic humor process, or the choice of topic or manner of delivery, carries a message, perhaps more often implicit than explicit, a message of which the narrator might or might not be aware, that he might or might not intend to be taken seriously, that the listener might or might not take seriously, and that might match or fail to match the true



sentiments of the narrator. Hence arises not only the possibility of misunderstanding (the listener takes the narrator to be saying that he, the listener, is ugly when in fact he neither wants to say this nor believes it), but also that of accidental communication, as it were (the listener can tell that the narrator really does think he is ugly even though the latter has no intention of revealing this).

In conclusion, by reference to the present hypothesis, viz., that the basic humor process is the process that has been described, it is indeed readily possible to imagine how it might be that humor influences health in all the ways that have been discussed. This result lends support to the claim that the basic humor process is indeed the process in question. It is far, however, from clinching the case, for several reasons: It has not been proved through fully reliable observation that humor actually works in the various ways described. Moreover, it might be possible to explain the influence of humor on health, or more broadly, the place of humor in human life, equally plausibly in terms of a substantially different hypothesis concerning the nature of the basic humor process.

In closing, it appears safe to say that the most important task facing those psychologists who seek an understanding of the phenomenon of humor is to make controlled observations and devise and perform tests whereby the question of the nature of the basic humor process can be decided once and for all.

#### NOTES

1. See (1) Sigmund Freud, *Der Witz und seine Beziehung zum Unbewussten*, Leipzig and Vienna: Deuticke, 1905 (English translation by James Strachey, *Jokes and Their Relation to the Unconscious*, New York and London: W. W. Norton, 1960); (2) Arthur Koestler, *The Act of Creation*, New York: Macmillan, 1964, Book One, Part One, "The Jester"; (3) John Allen Paulos, *Mathematics and Humor*, Chicago and London: University of Chicago, 1980.
2. See his *Humor: Its Origin and Development*, San Francisco: W. H. Freeman, 1979, especially pp. 152 ff.
3. The expression "jogging for the innards" is due, as are many valuable observations, to Norman Cousins, *Anatomy of an Illness as Perceived by the Patient: Reflections on Healing and Regeneration*, New York and London, W. W. Norton, 1979. See also (1) Herbert Spencer, "The Physiology of Laughter," *Macmillan's Magazine*, 1860, 1, pp. 395-402; (2) Charles Darwin, *The Expression of the Emotions in Man and Animals*, London: Murray, 1872; (3) Ewald Hecker, *Die Physiologie und Psychologie des Lachens und des Komischen*, Leipzig, 1873; (4) G. V. N. Dearborn, "The Nature of the Smile and the Laugh," *Science*, June 1, 1900, 9, pp. 851-56; (5) William McDougall, "Why Do We Laugh?" *Scribners*, 1922, 71, pp. 359-63; (6) V. K. Krishna Menon, *A Theory of Laughter*, London: Allen & Unwin, 1931; (7) H. A. Paskind, "Effect of Laughter on Muscle Tone," *Archives of Neurology and Psychiatry*, 1932, 28, pp. 623-28; (8) William F. Fry, Jr., "The Respiratory Components of Mirthful Laughter," *Journal of Biological Psychology*, 1977, 19:2, pp. 39-50.
4. *Esar's Comic Dictionary*, Fourth Edition, Garden City, New York: Doubleday, 1983.
5. Jacob Levine, "Humor and Mental Health," in *The Encyclopedia of Mental Health*, 1963, Vol. 3, p. 793.

6. Gwynne Dyer recounts this incident in his *War*, New York, Crown, 1985.
7. Paulos, *Mathematics and Humor*, p. 36, uses this case as an example of the humor of repetition.
8. See the following works of William McDougall: (1) "The Theory of Laughter," *Nature*, 1903, 67, 318-19; (2) "Why Do We Laugh?" *Scribners*, 1922, 71, pp. 359-63; (3) *An Outline of Psychology*, London: Methuen, 1923.
9. See his *Laughter and Liberation*, Los Angeles, Nash, 1971.
10. See Henri Bergson, *Laughter: An Essay on the Meaning of the Comic*, New York: Macmillan, 1911.
11. For information on obsessive/compulsive behavior, the following authority was consulted: Robert M. Goldenson, *The Encyclopedia of Human Behavior*, Garden City, New York: Doubleday, 1970, article "Obsessive-Compulsive Reaction."
12. For sociological and anthropological treatments of humor, see (1) William H. Martineau, "A Model of the Social Functions of Humor," in Goldstein and McGhee, *The Psychology of Humor: Theoretical Perspectives and Empirical Issues*, New York: Academic, 1972; (2) Anton C. Zijderveld, "The Sociology of Humor and Laughter," *Current Sociology [La Sociologie Contemporaine]*, 1983 (Winter), 31:3; (3) Mahadev L. Apte, *Humor and Laughter: An Anthropological Approach*, Ithaca and London: Cornell University, 1985.
13. *The Encyclopedia of Human Behavior*, p. 188.